



# DISABILITY AND COMMUNICATION ACCESS BOARD

919 Ala Moana Boulevard, Room 101 • Honolulu, Hawaii 96814  
Ph. (808) 586-8121 (V/TDD) • Fax (808) 586-8129

## INTERPRETIVE OPINION

Pursuant to §103-50, Hawaii Revised Statutes (HRS), all buildings and facilities constructed by, or on behalf of the State or any county, shall conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and amendments. In accordance to HRS §103-50 and Chapter 11-217, Hawaii Administrative Rules, the Disability and Communication Access Board has authority to issue interpretive opinions to HRS §103-50 design standards.

**Docket: DCAB 2002-13:** Interpretive Opinion on ADAAG 4.5 Ground and Floor Surfaces. Do plastic sub-surface reinforcement structure systems and wood-plastic composite decking systems meet the minimum requirements of section 4.5?

**Summary:** ADAAG Section 4.5 - Ground and floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, slip-resistant, and shall comply with 4.5. The Access Board's Bulletin #4, April 1994, Surfaces – materials stabilized and retained by permanent or temporary geotextiles, gridforms, or similar construction may perform satisfactorily for persons using wheelchairs and walking aids. Maintenance is the key concern of the U.S. Access Board in allowing an interpretive opinion on gravel-or grass-embedded sub-surface reinforcement systems. With support from the Access Board, Beneficial Designs, Inc.'s technical article states that there are no surfaces that are accessible to everyone, because of the infinite range of abilities among the population. An objective test procedure for measuring the firmness and stability of surfaces with a portable device and performance specifications needs to be accepted in order to enable land managers to determine whether the surface material on a trail (i.e., on site) is considered "accessible." Surface firmness and stability should be measured using an objective device suitable for use "on trail" or in the field because surface characteristics vary dramatically depending on the installation at the actual site.

The Department of Justice (DOJ) requires a route to comply with the criteria of *firmness, stability, and slip-resistance*, also applicable to concrete or asphalt. With so many types of materials available, one product will not be endorsed over another. The National Center on Accessibility, not having researched these products, points to the manufacturers' research and customer reference lists for further information. In their opinion, when in compliance with spacing and change-in-level requirements along with *maintenance* and proper installation, wood-plastic decking systems may provide access. The sub-surface reinforcement structures require proper filling (types of gravel according to specifications), compaction, and maintenance; initially accessible may be fines compacted with dust, but such filling is prone to wash outs requiring a high level of maintenance. *Maintenance* is not addressed by DCAB's document review process since it is not covered by ADAAG, but is a requirement under the DOJ's publication 28 C.F.R. Part 36, which states, "Section 36.211 provides that a public accommodation shall maintain in operable working condition those features of facilities and equipment that are required to be readily accessible to and usable by persons with disabilities by the Act or this part."

**Ruling:** For buildings or facilities subject to HRS § 103-50,

### ADAAG 4.5 Ground and Floor Surfaces

Plastic sub-surface reinforcement structure systems with grass-embedding or gravel-embedding, and wood-plastic composite decking systems may provide accessible surfaces in compliance with the criteria of firmness, stability, slip-resistance, and changes in level when such systems are properly installed and maintained.

[Rul:10/02](Auth and Imp: HRS §103-50)

If you have any questions or comments regarding this ruling, please call us at 586-8121.

DISABILITY AND COMMUNICATION ACCESS BOARD